further emit white light, or may further comprise a light source that emits white light.

[0014]

In the irradiation device according to the present invention, the light having a wavelength within the range of 350 to 400 nm, inclusive, may have an irradiance of 0.02 to 13.5 W/m^2, inclusive, on the eyeball surface when the instrument is worn.

[0015]

In the irradiation device according to the present invention, the instrument may be eyeglasses, a cap, or an ear hook.

Effect of the Invention

[0016]

According to an irradiation device of the present invention, it is possible to provide an irradiation device that is wearable and capable of preventing myopia, slowing the progression of myopia, or the like by the action of light irradiated toward an eyeball.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

Fig. 1 is a schematic view illustrating an example (an eyeglasses type) of an irradiation device according to the present invention.

Fig. 2 is a schematic view illustrating an example (a cap type) of the irradiation device according to the present invention.

Fig. 3 is a schematic view illustrating an example (an ear hook type) of the irradiation device according to the present invention.

Fig. 4 is a schematic view illustrating an example (an eyeball mounting type) of the irradiation device according to the present invention.

Fig. 5 is a graph showing the relationship between wavelength and spectral irradiance of light of a violet fluorescent lamp used in Experiment 1.

Fig. 6 is a graph showing a change in axial lengths of chicks irradiated with violet light and chicks not irradiated with violet light in Experiment 1.

Figs. 7A to 7C are examples of an eyeglasses-type irradiation device used in Experiment 3, Fig. 7A being an example with an LED provided on an outer end side, Fig. 7B being an example with an LED provided in the middle, and Fig. 7C being an example with an LED provided on an inner end side.

Fig. 8 is a light spectrum of a light source used in Experiment 3.

Fig. 9 is a schematic diagram illustrating an example of an irradiation device comprising a light-emitting element of light having a wavelength within a range of 350 to 400 nm, inclusive, and a light-emitting element of white light.

Fig. 10 is a schematic diagram illustrating an example of an irradiation device comprising a light-emitting element of light having a wavelength within a range of 350 to 400 nm, inclusive, and a light-emitting element of white light.

Embodiments of the Invention

[0018]

An irradiation device according to the present invention is described below with reference to the drawings. The present invention is not limited to the embodiments and

What is claimed is:

1. An irradiation device comprising:
a light source; and
an instrument for mounting the light source;
the light source emitting at least light having a wavelength within a range of 350 to 400 nm, inclusive, and being disposed in a position allowing irradiation in an eyeball direction when the instrument is mounted; and
the light source being disposed in a position 0 to 100 mm, inclusive, from a surface of the eyeball, wherein
the light having a wavelength within the range of 350 to 400 nm, inclusive, has an irradiance of 0.02 to 13.5 W/m^2, inclusive, on an eyeball surface when the instrument is worn.

2. The irradiation device according to claim 1, wherein
the light source further emits light having a wavelength of 440 to 480 nm, inclusive, or further comprises another light source that emits light having a wavelength of 440 to 480 nm, inclusive.

3. The irradiation device according to claim 1, wherein
the light source further emits one type or two or more types of light selectable from red light, near infrared light, and far infrared light, or further comprises another light source that emits one type or two or more types of light selectable from red light, near infrared light, and far infrared light.

4. The irradiation device according to claim 1, wherein
the light source further emits white light, or further comprises a light source that emits white light.

5. The irradiation device according to any one of claims 1 to 4, wherein
the instrument is an eyeglasses type, a cap type, or an ear hook type.